

**ABSTRACT**

A pressure activated valve for medical applications comprises a housing having a lumen extending therethrough from a proximal end to a distal end thereof and a flow control membrane extending across the lumen to control flow therethrough, the flow control membrane including a mounting portion at which the flow control membrane is coupled to the housing and a lumen occluding portion having a slit extending therethrough so that, when the lumen occluding portion is subjected to a pressure of at least a predetermined threshold level, the lumen occluding portion moves from a closed configuration in which flow through the lumen is prevented to an open configuration in which flow is permitted and wherein a thickness of the mounting portion is greater than a thickness of the lumen occluding portion. A method of forming a membrane for a pressure activated valve, comprises the steps of forming a substantially planar flow control membrane dimensioned to fit in a housing of the pressure activated valve, wherein a mounting portion of the flow control membrane is adapted to engage the housing, and forming at least one slit in the flow control membrane, the slit being openable by pressure of a fluid in the pressure activated valve of at least a predetermined threshold level in combination with the steps of forming an annular base membrane dimensioned to substantially overlie the mounting portion of the flow control membrane and stacking the base membrane on the mounting portion of the flow control membrane.